



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
CINCINNATI, OHIO 45268

October 23, 2012

Tim Hoffman - Owner
Dinsmore & Shohl LLP
2003 Dryden Road
Moraine, Ohio 45439

Brian Clark - Tenant
Bullseye Amusements
2003 Dryden Road
Moraine, Ohio 45439

Dear Messrs. Hoffman and Clark:

Re: Summary of Results from 2012 Vapor Intrusion Study
South Dayton Dump and Landfill Site – Bullseye Amusements (Building 14)

The United States Environmental Protection Agency (U.S. EPA) prepared this letter to inform you of the results of the sub-slab (space under your building floor) and indoor air samples collected from your property in 2012. Samples were collected in 2012 as part of the vapor intrusion (VI) investigation at the South Dayton Dump and Landfill (SDDL) Site. Conestoga-Rovers & Associates (CRA) collected these samples to determine if solvent- or petroleum-related compounds (see Table 1) are present in soil vapor beneath the foundations and in the indoor air of your property at concentrations which exceed sub-slab and/or indoor air VI screening levels, as established by the Ohio Department of Health (ODH).

VI is the migration of volatile chemicals from the subsurface into overlying buildings. VI is a potential concern at any building, existing or planned, located near soil, groundwater, or soil vapor containing solvent- or petroleum-related compounds that may volatilize or chemicals that are combustible.

The samples were collected by CRA and submitted to TestAmerica Inc. CRA received and validated the results of the laboratory analysis and submitted those results to the U.S. EPA.

The ODH has recommended the screening levels for sub-slab and indoor air samples. The screening levels represent concentrations of a substance that are unlikely to cause harmful (adverse) health effects in exposed people. Detections in indoor air below these levels are not of a health concern. A summary of the analytical results and comparisons to the ODH screening levels can be found in Table 1.

Compounds detected at concentrations greater than the ODH screening levels from sub-slab and indoor air samples are presented below. All of the air samples are measured in units called parts per billion by volume (ppbv). A map identifying each sample location within your building(s) can be found in **Attachment A**.

TABLE 1
SUMMARY OF 2012 SAMPLING RESULTS
FOR
BULLSEYE AMUSEMENTS

Building / Probe	Sampling Date	Sample Type	Parameter	ODH Screening Level (ppbv)	Detected Concentration (ppbv)
Building 14 Probe A	1-6-12	Sub-slab	1,1-DCA Vinyl Chloride	160 20	500 / 320 84 / 70
Building 14 Probe A	3-28-12	Sub-slab	1,1-DCA Vinyl Chloride	160 20	970 820 J
Building 14 Probe A	8-2-12	Sub-slab	1,1-DCA Benzene TCE Vinyl Chloride	160 20 20 20	4,100 50 36 J 5,500
Building 14 Probe A	8-2-12	Indoor air	Benzene	2	2.4
Building 14 Probe B	8-2-12	Indoor air	Benzene	2	2.1
Building 14 Probe C	3-27-12	Sub-slab	TCE	20	27

Notes:

500 / 320 – Result / Duplicate Result

J – Estimated Quantity

DCA – Dichloroethane

TCE – Trichloroethene

What do these results mean?

On August 2, 2012, the chemical benzene was observed in a sub-slab sample collected in Building 14 at a concentration of 50 ppbv. This result exceeds the ODH benzene sub-slab screening level of 20 ppbv. The chemical benzene was also observed in an indoor air sample at a concentration as high as 2.4 ppbv. This result exceeds the ODH benzene indoor air screening level of 2 ppbv. These results confirm that vapor intrusion is occurring in Building 14.

Based on the benzene laboratory results of the sub-slab and indoor air samples collected from Building 14, the U.S. EPA and ODH conclude that there is a potential public health threat posed by benzene vapor intrusion. U.S. EPA will be contacting you in the near future to discuss mitigation options for your property as part of the SDDL Site removal action.

The U.S. EPA and ODH would like to take this opportunity to thank you for participating in this important investigation.

If you have health-related questions, please contact Dr. Bob Frey at the ODH at 614-466-1069. If you have questions related to the sampling or on-going site investigation, please visit our website at www.epaosc.org/southdaytonedumpsite or contact me at 513-569-7539.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve L. Renninger", enclosed in a thin black rectangular border.

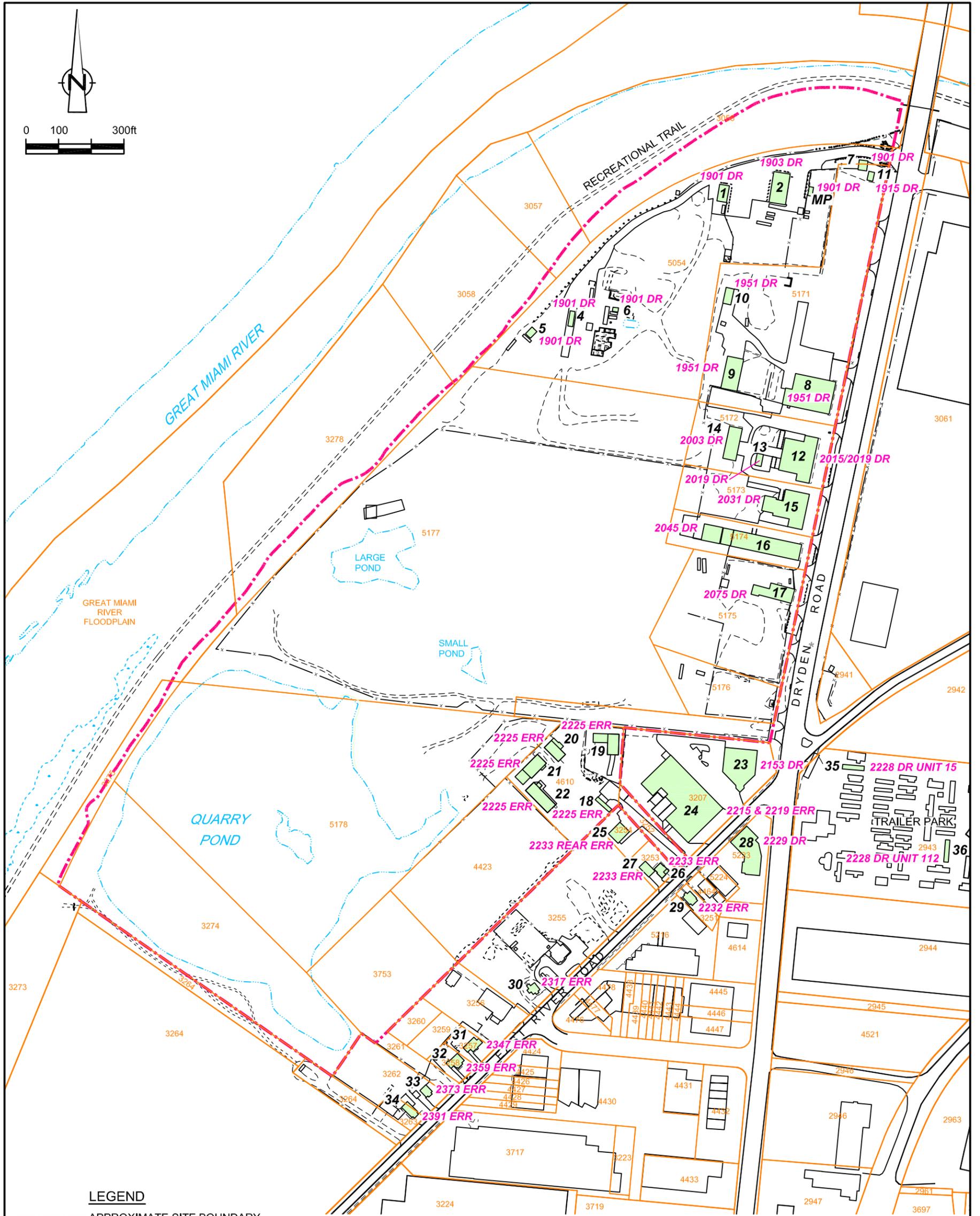
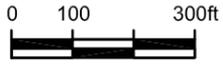
Steven L. Renninger
On-Scene Coordinator
U.S. EPA Region 5

Attachments:

- A – Sample Location Map
- B – Validated Analytical Results

cc: Leslie Patterson - U.S. EPA Remedial Program Manager
Laura Marshall - Ohio EPA, Site Coordinator
Adam Loney, CRA
Tina Ortiz – Mark Fornes Realty, Inc.
Site File

ATTACHMENT A
SAMPLE LOCATION MAP



LEGEND

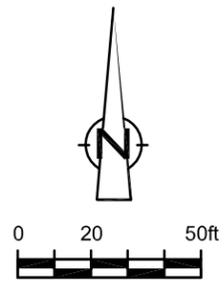
- - - - - APPROXIMATE SITE BOUNDARY
- - - - - EDGE OF WATER
- - - - - PARCEL BOUNDARY
- ERR** EAST RIVER ROAD
- DR** DRYDEN ROAD
- 3263 PARCEL NUMBER
- 1** USEPA REMOVAL PROGRAM BUILDING NUMBER
- 2391 ERR ADDRESS

NOTE: 1901 DRYDEN ROAD PARCEL 5054 BUILDING 3 WAS DEMOLISHED IN FEBRUARY 2012.

**MITIGATION SUMMARY DATABASE BUILDING NUMBERS
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio**



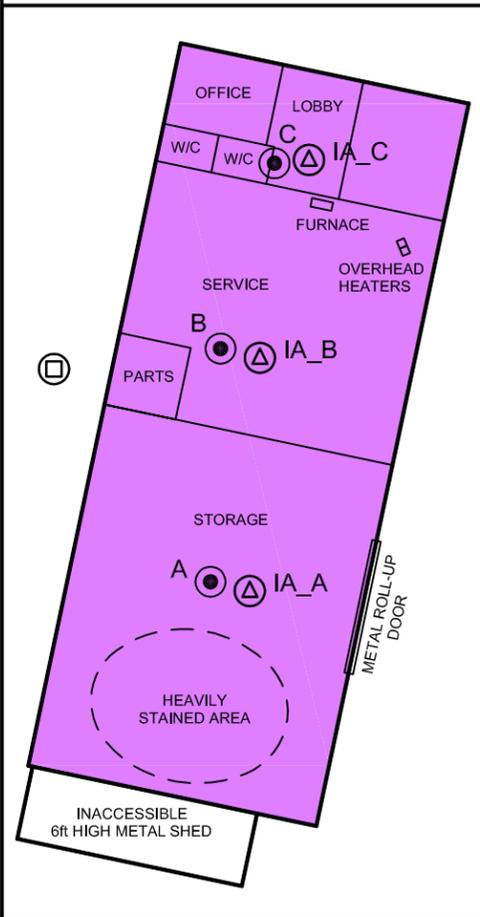
SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE,
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008



LEGEND

- - - - APPROXIMATE SITE BOUNDARY
- PARCEL BOUNDARY
- SUB SLAB SOIL VAPOUR BUILDING LOCATION
- MW-202 ● MONITORING WELL LOCATION
- VAS01 ▲ VAS SAMPLING LOCATION
- GP04-09 ■ DEEP LANDFILL GAS PROBE
- TT1 — TEST TRENCH LOCATION
- SUB SLAB SOIL VAPOR SAMPLE LOCATION
- △ INDOOR AIR SAMPLE LOCATION
- OUTDOOR AIR SAMPLE LOCATION

BLOW-UP
N.T.S.



PROFILE VIEW
N.T.S.



Building Characteristics:
Single-story, slab-on-grade, commercial use building constructed prior to 1959. Building is divided into three sections. Total footprint is 2,886 sq. ft. Average air tightness. Exterior openings - vents, utility pipe penetrations, office windows, 2 personnel doors, bay door. Attached metal shed on north side, 6 ft. high, not accessible during building survey. Southern 1/5 of the building is brick, approximately 10 ft. high with 8 ft. drop ceilings. Formerly used as office space (two separate offices). Heating provided by forced air natural gas furnace, central A/C present. Heating through floor vents, return air through wall vents. Wall-to-wall carpet in offices. Northern 4/5 of the building is concrete block, approximately 15 ft. high. Formerly used for grease filter washing and filter storage. Bare concrete floor with area of heavy staining on the north side (former wash area). Not insulated, radiant heat ceiling unit, no A/C.

PARCEL 5172 - BULLSEYE AMUSEMENTS BUILDING 14
2003 DRYDEN ROAD
SOUTH DAYTON DUMP AND LANDFILL SITE
Moraine, Ohio



SOURCES:
THE PAYNE FIRM, INC., PROJECT 0279.44.05, FIGURE 1, DATED 9/12/05;
TETRA TECH EM INC., PROJECT L0312006-SOUTH DAYTON DUMP, FIGURE 2, SITE LAYOUT, 05/25/2004;
CITY OF MORAINE.
ABRAMS AERIAL SURVEY INC. PROJECT 38443, AASI 29610, 04/02/2008

ATTACHMENT B
VALIDATED ANALYTICAL RESULTS

TABLE 1

**SUMMARY OF SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
BUILDING 14 - 2003 DRYDEN ROAD
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORaine, OHIO**

Sample Location:	Building 14, Probe A	Building 14, Probe A	Building 14, Probe A	Building 14, Probe A	Building 14, Probe A	Building 14, Probe A	Building 14, Probe B			
Sample Location:	2003 Dryden Road	2003 Dryden Road	2003 Dryden Road	2003 Dryden Road	2003 Dryden Road	2003 Dryden Road	2003 Dryden Road			
Sample Date:	1/6/2012	1/6/2012	3/28/2012	8/2/2012	8/2/2012	8/2/2012	1/6/2012			
		Duplicate					Duplicate			
Parameter	Units	ODH Sub-Slab Screening Levels (Non-residential)	ODH Sub-Slab Action Levels (Non-residential)							
		a	b							
Volatile Organic Compounds										
1,1,1-Trichloroethane	ppb	NC	NC	0.70 U	0.83 U	1.0 U	6.1 U	-	-	0.28 U
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.80 U	0.95 U	2.1 U	12 U	-	-	0.32 U
1,1,2-Trichloroethane	ppb	NC	NC	0.38 U	0.45 U	1.9 U	11 U	-	-	0.15 U
1,1-Dichloroethane	ppb	160	1600	500 ^a	320 ^a	970 ^a	4100 ^{ab}	-	-	54
1,1-Dichloroethene	ppb	NC	NC	0.60 U	0.71 U	3.0 J	25 J	-	-	0.24 U
1,2,4-Trichlorobenzene	ppb	NC	NC	1.0 U	1.2 U	3.4 U	20 UJ	-	-	0.40 U
1,2,4-Trimethylbenzene	ppb	NC	NC	1.0 U	1.2 U	2.2 U	13 U	-	-	4.8
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.36 U	0.43 U	1.5 U	8.9 U	-	-	0.14 U
1,2-Dichlorobenzene	ppb	NC	NC	0.96 U	1.1 U	2.4 U	14 U	-	-	0.38 U
1,2-Dichloroethane	ppb	NC	NC	0.62 U	0.74 U	1.6 U	9.5 U	-	-	0.25 U
1,2-Dichloroethene (total)	ppb	NC	NC	4.9	3.1 J	-	-	-	-	0.43 J
1,2-Dichloropropane	ppb	NC	NC	0.28 U	0.33 U	1.8 U	11 U	-	-	0.11 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.64 U	0.76 U	2.1 J	6.5 U	-	-	1.9
1,3,5-Trimethylbenzene	ppb	NC	NC	1.0 U	1.2 U	2.2 UJ	13 U	-	-	1.9
1,3-Butadiene	ppb	NC	NC	0.20 U	0.24 U	2.2 UJ	13 U	-	-	0.080 U
1,3-Dichlorobenzene	ppb	NC	NC	0.88 U	1.0 U	2.2 U	13 U	-	-	0.35 U
1,4-Dichlorobenzene	ppb	NC	NC	0.88 U	1.0 U	2.2 U	13 U	-	-	0.35 U
1,4-Dioxane	ppb	NC	NC	1.8 U	2.1 U	2.8 U	16 U	-	-	0.70 U
2,2,4-Trimethylpentane	ppb	NC	NC	0.72 U	0.86 U	22	98 J	-	-	0.29 U
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	8.2 J	7.7 J	6.9 U	40 U	-	-	0.14 U
2-Chlorotoluene	ppb	NC	NC	0.94 U	1.1 U	2.2 U	13 U	-	-	0.38 U
2-Hexanone	ppb	NC	NC	0.78 U	0.93 U	2.0 U	12 U	-	-	0.31 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.94 U	1.1 U	2.2 U	13 U	-	-	0.38 U
4-Ethyl toluene	ppb	NC	NC	0.92 U	1.1 U	2.3 U	13 U	-	-	0.81 J
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.52 U	0.62 U	3.9 J	9.1 U	-	-	0.21 U
Acetone	ppb	NC	NC	0.90 U	17 J	48 U	280 U	-	-	2.5 J
Allyl chloride	ppb	NC	NC	0.38 U	0.45 U	1.7 U	9.7 U	-	-	0.15 U
Benzene	ppb	20	200	1.9 J	1.8 J	6.0 J	50 ^a	-	-	0.14 U
Benzyl chloride	ppb	NC	NC	0.92 U	1.1 U	2.7 U	16 U	-	-	0.37 UJ
Bromodichloromethane	ppb	NC	NC	0.56 U	0.67 U	1.5 U	8.9 U	-	-	0.22 U
Bromoform	ppb	NC	NC	0.38 U	0.45 U	1.7 U	9.7 U	-	-	0.15 U
Bromomethane (Methyl bromide)	ppb	NC	NC	0.24 U	0.29 U	1.1 U	6.5 U	-	-	0.096 U
Butane	ppb	NC	NC	180	150	920 J	3700	-	-	0.088 U
Carbon disulfide	ppb	NC	NC	16	14	25	45 J	-	-	0.53 U
Carbon tetrachloride	ppb	NC	NC	0.66 U	0.79 U	1.3 UJ	7.7 U	-	-	0.26 U
Chlorobenzene	ppb	NC	NC	0.40 U	0.48 U	1.7 U	9.9 U	-	-	0.16 U
Chlorodifluoromethane	ppb	NC	NC	2.9 J	2.7 J	9.1	23 J	-	-	0.27 U
Chloroethane	ppb	NC	NC	0.32 U	0.38 U	1.2 U	7.1 U	-	-	0.13 U

TABLE 1

**SUMMARY OF SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
BUILDING 14 - 2003 DRYDEN ROAD
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORaine, OHIO**

<i>Sample Location:</i>				<i>Building 14, Probe A</i>	<i>Building 14, Probe B</i>					
<i>Sample Location:</i>				<i>2003 Dryden Road</i>						
<i>Sample Date:</i>				<i>1/6/2012</i>	<i>1/6/2012</i>	<i>3/28/2012</i>	<i>8/2/2012</i>	<i>8/2/2012</i>	<i>8/2/2012</i>	<i>1/6/2012</i>
					<i>Duplicate</i>				<i>Duplicate</i>	
<i>Parameter</i>	<i>Units</i>	<i>ODH Sub-Slab Screening Levels (Non-residential)</i>	<i>ODH Sub-Slab Action Levels (Non-residential)</i>							
		<i>a</i>	<i>b</i>							
Chloroform (Trichloromethane)	ppb	800	8000	0.62 U	0.74 U	1.3 U	7.7 U	-	-	0.93 J
Chloromethane (Methyl chloride)	ppb	NC	NC	0.26 U	0.31 U	5.5 UJ	32 U	-	-	0.10 U
cis-1,2-Dichloroethene	ppb	370	3700	2.6 J	1.5 J	6.9	110	-	-	0.43 J
cis-1,3-Dichloropropene	ppb	NC	NC	0.32 U	0.38 U	2.6 U	15 U	-	-	0.13 U
Cyclohexane	ppb	NC	NC	5.0	3.8 J	19	150	-	-	0.31 U
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.96 U	1.1 U	2.0 U	12 U	-	-	0.38 U
Dibromochloromethane	ppb	NC	NC	0.42 U	0.50 U	1.5 U	8.5 U	-	-	0.17 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	3.1 J	2.8 J	3.6 J	14 U	-	-	1.2 J
Ethylbenzene	ppb	2500	25000	0.44 U	0.52 U	2.4 U	14 U	-	-	1.2 J
Hexachlorobutadiene	ppb	NC	NC	1.3 U	1.5 U	2.7 U	16 UJ	-	-	0.52 U
Hexane	ppb	NC	NC	6.4	4.7 J	29	250	-	-	0.21 U
Isopropyl alcohol	ppb	NC	NC	0.74 U	0.88 U	5.3 J	8.9 U	-	-	0.30 U
Isopropyl benzene	ppb	NC	NC	0.62 U	0.74 U	2.1 U	12 U	-	-	0.25 U
m&p-Xylenes	ppb	2000	20000	0.96 U	1.1 U	4.2 U	24 U	-	-	7.1
Methyl methacrylate	ppb	NC	NC	0.26 U	0.31 U	2.7 U	16 U	-	-	0.10 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.32 U	0.38 U	5.9 U	34 U	-	-	0.13 U
Methylene chloride	ppb	NC	NC	1.0 J	1.1 J	1.6 U	9.1 U	-	-	0.10 U
Naphthalene	ppb	29	NC	1.7 U	2.0 U	3.1 U	18 UJ	-	-	0.69 UJ
N-Butylbenzene	ppb	NC	NC	1.1 U	1.3 U	1.6 U	9.3 U	-	-	0.44 U
N-Decane	ppb	NC	NC	-	-	-	11 U	-	-	-
N-Dodecane	ppb	NC	NC	-	-	-	16 UJ	-	-	-
N-Heptane	ppb	NC	NC	0.20 U	0.24 U	2.4 J	31 J	-	-	0.080 U
Nonane	ppb	NC	NC	-	-	-	8.7 U	-	-	-
N-Propylbenzene	ppb	NC	NC	1.0 U	1.2 U	1.9 U	11 U	-	-	0.43 J
N-Undecane	ppb	NC	NC	-	-	-	13 U	-	-	-
Octane	ppb	NC	NC	-	-	-	7.3 U	-	-	-
o-Xylene	ppb	2000	20000	0.44 U	0.52 U	2.2 J	12 U	-	-	3.9
Pentane	ppb	NC	NC	-	-	-	1300	-	-	-
Styrene	ppb	NC	NC	0.60 U	0.71 U	2.0 U	12 U	-	-	0.24 U
tert-Butyl alcohol	ppb	NC	NC	1.4 U	1.7 U	1.9 J	7.7 U	-	-	0.57 U
tert-Butylbenzene	ppb	NC	NC	0.94 U	1.1 U	2.3 U	13 U	-	-	0.38 U
Tetrachloroethene	ppb	250	2500	0.22 U	0.26 U	1.4 U	8.1 U	-	-	0.088 U
Tetrahydrofuran	ppb	NC	NC	0.36 U	0.43 U	2.2 U	13 U	-	-	0.14 U
Toluene	ppb	NC	NC	0.69 J	0.78 J	3.2 J	11 J	-	-	0.98 J
trans-1,2-Dichloroethene	ppb	NC	NC	2.2 J	1.6 J	5.3 J	35 J	-	-	0.26 U
trans-1,3-Dichloropropene	ppb	NC	NC	0.40 U	0.48 U	1.7 U	9.7 U	-	-	0.16 U
Trichloroethene	ppb	20	200	2.1 J	1.5 J	6.4 J	36 J ^a	-	-	3.5
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.68 U	0.81 U	0.83 U	4.9 U	-	-	0.27 U
Trifluorotrchloroethane (Freon 113)	ppb	NC	NC	0.20 U	0.24 U	1.1 U	6.3 U	-	-	0.080 U
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.38 U	0.45 U	1.2 U	7.1 U	-	-	0.15 U
Vinyl chloride	ppb	20	200	84 ^a	70 ^a	820 J ^{ab}	5500 ^{ab}	-	-	0.23 U
Xylenes (total)	ppb	NC	NC	0.44 U	0.52 U	-	-	-	-	11

TABLE 1

**SUMMARY OF SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
BUILDING 14 - 2003 DRYDEN ROAD
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORaine, OHIO**

Sample Location:	Building 14, Probe A	Building 14, Probe A	Building 14, Probe A	Building 14, Probe A	Building 14, Probe A	Building 14, Probe A	Building 14, Probe B		
Sample Location:	2003 Dryden Road	2003 Dryden Road	2003 Dryden Road	2003 Dryden Road	2003 Dryden Road	2003 Dryden Road	2003 Dryden Road		
Sample Date:	1/6/2012	1/6/2012	3/28/2012	8/2/2012	8/2/2012	8/2/2012	1/6/2012		
		Duplicate					Duplicate		
Parameter	Units	ODH Sub-Slab Screening Levels (Non-residential)	ODH Sub-Slab Action Levels (Non-residential)						
		a	b						
Tentatively Identified Compounds (TIC) Volatiles									
(1alpha,2beta,4beta)-1,2,4-Trimethyl-cyclohexane A	ppb	NC	NC	49 JN	42 JN	-	510 NJ	-	-
1,1,3-Trimethylcyclohexane A	ppb	NC	NC	-	93 JN	-	-	-	-
1,1,3-Trimethylcyclopentane A	ppb	NC	NC	85 JN	59 JN	-	-	-	-
1,2,3-trimethylcyclopentane (1 alpha,2 alpha,3 beta) A	ppb	NC	NC	70 JN	50 JN	-	1200 NJ	-	-
1,2,4-Trimethyl cyclopentane A	ppb	NC	NC	61 JN	-	-	1300 NJ	-	-
1,4-Dimethylcyclohexane A	ppb	NC	NC	57 JN	-	-	-	-	-
2,4-Dimethylhexane A	ppb	NC	NC	-	-	-	660 NJ	-	-
2-Methylbutane A	ppb	NC	NC	-	-	-	880 NJ	-	-
3-Methylhexane A	ppb	NC	NC	-	-	-	800 NJ	-	-
cis-1,3-Dimethylcyclopentane A	ppb	NC	NC	-	-	-	640 NJ	-	-
Cyclohexane, 1,1,2,3-tetramethyl- A	ppb	NC	NC	-	86 JN	-	-	-	-
Cyclotrisiloxane, hexamethyl- A	ppb	NC	NC	-	-	-	-	-	52 JN
Propane A	ppb	NC	NC	-	-	-	U	-	-
trans-1,2-Dimethylcyclohexane A	ppb	NC	NC	-	-	-	730 NJ	-	-
Unknown 1	ppb	NC	NC	67 J	46 J	-	-	-	10 J
Unknown 2	ppb	NC	NC	110 J	46 J	-	-	-	230 J
Unknown 3	ppb	NC	NC	54 J	39 J	-	-	-	84 J
Unknown 4	ppb	NC	NC	93 J	81 J	-	-	-	-
Unknown 5	ppb	NC	NC	100 J	43 J	-	-	-	-
Unknown A	ppb	NC	NC	-	-	-	1000 NJ	-	-
Unknown B	ppb	NC	NC	-	-	-	1400 NJ	-	-
Unknown C	ppb	NC	NC	-	-	-	780 NJ	-	-
Unknown D	ppb	NC	NC	-	-	-	550 NJ	-	-
Unknown E	ppb	NC	NC	-	-	-	620 NJ	-	-
Unknown F	ppb	NC	NC	-	-	-	1700 NJ	-	-
Unknown G	ppb	NC	NC	-	-	-	630 NJ	-	-
Gases									
Methane	%	0.5	0.5	-	-	-	0.19 U	0.19 U	-
Field Parameter									
Methane, field (unfiltered)	%	0.5	0.5	0.0 /0.0	0.0 /0.0	-	-	-	0.0 /0.0
Methane, field (filtered)	%	0.5	0.5	-	-	0 /0.0	0.2 /0.3	-	0.3 /0.2

Notes:

- J - The chemical was detected by the laboratory, the listed value is an approximate concentration
- JN or NJ - The listed value of the tentatively identified compound is an approximate concentration
- U - The chemical was not detected in the sample at the detection limit shown.
- UJ - The chemical was not detected in the sample at the approximate detection limit shown.
- NC - No criterion
- Not applicable.
- Concentration was greater than applicable criteria.

TABLE 1

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BUILDING 14 - 2003 DRYDEN ROAD
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAIN, OHIO**

<i>Sample Location:</i>	<i>Building 14, Probe B</i>	<i>Building 14, Probe B</i>	<i>Building 14, Probe B</i>	<i>Building 14, Probe C</i>						
<i>Sample Location:</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>			
<i>Sample Date:</i>	<i>3/26/2012</i>	<i>3/27/2012</i>	<i>8/2/2012</i>	<i>1/6/2012</i>	<i>3/2/2012</i>	<i>3/27/2012</i>	<i>8/2/2012</i>			
<i>Parameter</i>	<i>Units</i>	<i>ODH Sub-Slab Screening Levels (Non-residential)</i>	<i>ODH Sub-Slab Action Levels (Non-residential)</i>							
		<i>a</i>	<i>b</i>							
<i>Volatile Organic Compounds</i>										
1,1,1-Trichloroethane	ppb	NC	NC	-	0.056 J	0.12 J	0.18 J	-	0.29	0.34
1,1,2,2-Tetrachloroethane	ppb	NC	NC	-	0.061 U	0.12 U	0.16 U	-	0.061 U	0.061 U
1,1,2-Trichloroethane	ppb	NC	NC	-	0.054 U	0.11 U	0.076 U	-	0.054 U	0.054 U
1,1-Dichloroethane	ppb	160	1600	-	77	130	0.14 U	-	0.071 J	0.026 U
1,1-Dichloroethene	ppb	NC	NC	-	0.054 J	0.12 J	0.12 U	-	0.032 U	0.032 U
1,2,4-Trichlorobenzene	ppb	NC	NC	-	0.098 U	0.20 U	0.20 U	-	0.098 U	0.098 UJ
1,2,4-Trimethylbenzene	ppb	NC	NC	-	0.063 U	0.13 U	0.21 U	-	0.063 U	0.063 U
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	-	0.044 U	0.088 U	0.072 U	-	0.044 U	0.044 U
1,2-Dichlorobenzene	ppb	NC	NC	-	0.070 U	0.14 U	0.19 U	-	0.070 U	0.070 U
1,2-Dichloroethane	ppb	NC	NC	-	0.047 U	0.094 U	0.12 U	-	0.047 U	0.047 U
1,2-Dichloroethene (total)	ppb	NC	NC	-	-	-	0.056 U	-	-	-
1,2-Dichloropropane	ppb	NC	NC	-	0.052 U	0.10 U	0.056 U	-	0.052 U	0.052 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	-	0.48	0.62	0.13 U	-	0.032 U	0.032 U
1,3,5-Trimethylbenzene	ppb	NC	NC	-	0.065 UJ	0.13 U	0.20 U	-	0.065 UJ	0.065 U
1,3-Butadiene	ppb	NC	NC	-	0.064 U	0.13 U	0.040 U	-	0.064 U	0.064 U
1,3-Dichlorobenzene	ppb	NC	NC	-	0.065 U	0.13 U	0.18 U	-	0.065 U	0.065 U
1,4-Dichlorobenzene	ppb	NC	NC	-	0.064 U	0.13 U	0.18 U	-	0.064 U	0.064 U
1,4-Dioxane	ppb	NC	NC	-	0.080 U	0.16 U	0.35 U	-	0.080 U	0.080 U
2,2,4-Trimethylpentane	ppb	NC	NC	-	0.18 J	0.078 U	0.14 U	-	0.039 U	0.039 U
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	-	0.76 J	0.68 J	0.068 U	-	0.24 J	0.36 J
2-Chlorotoluene	ppb	NC	NC	-	0.063 U	0.13 U	0.19 U	-	0.063 U	0.063 U
2-Hexanone	ppb	NC	NC	-	0.058 U	0.12 U	0.16 U	-	0.058 U	0.058 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	-	0.064 U	0.13 U	0.19 U	-	0.064 U	0.064 U
4-Ethyl toluene	ppb	NC	NC	-	0.066 U	0.13 U	0.18 U	-	0.066 U	0.066 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	-	0.045 U	0.090 U	0.10 U	-	0.045 U	0.045 U
Acetone	ppb	NC	NC	-	4.0 J	4.4 J	1.3 J	-	2.0 J	2.9 J
Allyl chloride	ppb	NC	NC	-	0.048 U	0.096 U	0.076 U	-	0.048 U	0.048 U
Benzene	ppb	20	200	-	0.077 J	0.11 U	0.072 U	-	0.056 U	0.056 U
Benzyl chloride	ppb	NC	NC	-	0.078 U	0.16 U	0.18 U	-	0.078 U	0.078 U
Bromodichloromethane	ppb	NC	NC	-	0.11 J	0.20 J	0.11 U	-	0.044 U	0.044 U
Bromoform	ppb	NC	NC	-	0.048 U	0.096 U	0.076 U	-	0.048 U	0.048 U
Bromomethane (Methyl bromide)	ppb	NC	NC	-	0.032 U	0.064 U	0.048 U	-	0.032 U	0.032 U
Butane	ppb	NC	NC	-	1.2	0.78 J	0.044 U	-	0.46	0.13 J
Carbon disulfide	ppb	NC	NC	-	0.11 J	0.11 J	0.26 U	-	0.031 U	0.058 J
Carbon tetrachloride	ppb	NC	NC	-	0.038 UJ	0.076 U	0.13 U	-	0.070 J	0.075 J
Chlorobenzene	ppb	NC	NC	-	0.049 U	0.098 U	0.080 U	-	0.049 U	0.049 U
Chlorodifluoromethane	ppb	NC	NC	-	0.84	1.8	0.14 U	-	0.32	0.40
Chloroethane	ppb	NC	NC	-	0.11 J	0.50	0.064 U	-	0.035 U	0.080 J

TABLE 1

**SUMMARY OF SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
BUILDING 14 - 2003 DRYDEN ROAD
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAIN, OHIO**

<i>Sample Location:</i>				<i>Building 14, Probe B</i>	<i>Building 14, Probe B</i>	<i>Building 14, Probe B</i>	<i>Building 14, Probe C</i>			
<i>Sample Location:</i>				<i>2003 Dryden Road</i>						
<i>Sample Date:</i>				<i>3/26/2012</i>	<i>3/27/2012</i>	<i>8/2/2012</i>	<i>1/6/2012</i>	<i>3/2/2012</i>	<i>3/2/2012</i>	<i>8/2/2012</i>
<i>Parameter</i>	<i>Units</i>	<i>ODH Sub-Slab Screening Levels (Non-residential)</i>	<i>ODH Sub-Slab Action Levels (Non-residential)</i>							
		<i>a</i>	<i>b</i>							
Chloroform (Trichloromethane)	ppb	800	8000	-	1.1	3.0	0.12 U	-	0.043 J	0.097 J
Chloromethane (Methyl chloride)	ppb	NC	NC	-	0.16 U	0.32 U	0.052 U	-	0.16 U	0.61
cis-1,2-Dichloroethene	ppb	370	3700	-	0.97	2.2	0.056 U	-	0.060 U	0.060 U
cis-1,3-Dichloropropene	ppb	NC	NC	-	0.074 U	0.15 U	0.064 U	-	0.074 U	0.074 U
Cyclohexane	ppb	NC	NC	-	0.27 J	0.080 U	0.16 U	-	0.39 J	0.040 U
Cymene (p-Isopropyltoluene)	ppb	NC	NC	-	0.057 U	0.11 U	0.19 U	-	0.057 U	0.057 U
Dibromochloromethane	ppb	NC	NC	-	0.042 U	0.084 U	0.084 U	-	0.042 U	0.042 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	-	1.1	0.77	0.50 J	-	0.51	0.48
Ethylbenzene	ppb	2500	25000	-	0.068 U	0.14 U	0.088 U	-	0.068 U	0.068 U
Hexachlorobutadiene	ppb	NC	NC	-	0.078 U	0.16 U	0.36 J	-	0.078 U	0.078 UJ
Hexane	ppb	NC	NC	-	0.32 J	0.15 J	0.10 U	-	0.94	0.049 J
Isopropyl alcohol	ppb	NC	NC	-	2.5	0.45 J	1.6 J	-	2.3	0.11 J
Isopropyl benzene	ppb	NC	NC	-	0.060 U	0.12 U	0.12 U	-	0.060 U	0.060 U
m&p-Xylenes	ppb	2000	20000	-	0.20	0.32 J	0.19 U	-	0.12 U	0.12 U
Methyl methacrylate	ppb	NC	NC	-	0.079 U	0.16 U	0.052 U	-	0.079 U	0.079 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	-	0.17 U	0.34 U	0.064 U	-	0.17 U	0.17 U
Methylene chloride	ppb	NC	NC	-	0.045 U	0.090 U	0.17 J	-	0.045 U	0.045 U
Naphthalene	ppb	29	NC	-	0.090 U	0.18 U	0.34 U	-	0.090 U	0.090 UJ
N-Butylbenzene	ppb	NC	NC	-	0.046 UJ	0.092 U	0.22 U	-	0.046 UJ	0.046 U
N-Decane	ppb	NC	NC	-	-	0.11 U	-	-	-	0.056 U
N-Dodecane	ppb	NC	NC	-	-	0.16 U	-	-	-	0.078 UJ
N-Heptane	ppb	NC	NC	-	0.10 J	0.094 U	0.040 U	-	0.064 J	0.047 U
Nonane	ppb	NC	NC	-	-	0.086 U	-	-	-	0.043 U
N-Propylbenzene	ppb	NC	NC	-	0.056 U	0.11 U	0.20 U	-	0.056 U	0.056 U
N-Undecane	ppb	NC	NC	-	-	0.12 U	-	-	-	0.062 U
Octane	ppb	NC	NC	-	-	0.072 U	-	-	-	0.036 U
o-Xylene	ppb	2000	20000	-	0.084 J	0.15 J	0.088 U	-	0.061 U	0.061 U
Pentane	ppb	NC	NC	-	-	0.12 U	-	-	-	0.11 J
Styrene	ppb	NC	NC	-	0.058 U	0.12 U	0.12 U	-	0.058 U	0.058 U
tert-Butyl alcohol	ppb	NC	NC	-	3.9	0.19 J	0.28 U	-	0.23 J	0.051 J
tert-Butylbenzene	ppb	NC	NC	-	0.066 U	0.13 U	0.19 U	-	0.066 U	0.066 U
Tetrachloroethene	ppb	250	2500	-	0.41	1.0	0.11 J	-	0.43	0.28
Tetrahydrofuran	ppb	NC	NC	-	0.73 J	0.13 U	0.072 U	-	0.11 J	0.063 U
Toluene	ppb	NC	NC	-	1.4	0.39 J	0.28 J	-	1.8	0.18 J
trans-1,2-Dichloroethene	ppb	NC	NC	-	0.050 U	0.10 U	0.13 U	-	0.050 U	0.050 U
trans-1,3-Dichloropropene	ppb	NC	NC	-	0.048 U	0.096 U	0.080 U	-	0.048 U	0.048 U
Trichloroethene	ppb	20	200	-	4.7	16	2.5	-	27 ^a	1.2
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	-	0.089 J	0.30 J	0.29 J	-	0.29	0.34
Trifluorotrchloroethane (Freon 113)	ppb	NC	NC	-	0.067 J	0.68	0.31 J	-	0.44	0.81
Vinyl bromide (Bromoethene)	ppb	NC	NC	-	0.035 U	0.070 U	0.076 U	-	0.035 U	0.035 U
Vinyl chloride	ppb	20	200	-	0.071 U	0.14 U	0.12 U	-	0.071 U	0.071 U
Xylenes (total)	ppb	NC	NC	-	-	-	0.088 U	-	-	-

TABLE 1

**SUMMARY OF SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
BUILDING 14 - 2003 DRYDEN ROAD
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAIN, OHIO**

<i>Sample Location:</i>	<i>Building 14, Probe B</i>	<i>Building 14, Probe B</i>	<i>Building 14, Probe B</i>	<i>Building 14, Probe C</i>			
<i>Sample Location:</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>
<i>Sample Date:</i>	<i>3/26/2012</i>	<i>3/27/2012</i>	<i>8/2/2012</i>	<i>1/6/2012</i>	<i>3/2/2012</i>	<i>3/27/2012</i>	<i>8/2/2012</i>
<i>Parameter</i>	<i>Units</i>	<i>ODH Sub-Slab Screening Levels (Non-residential)</i>	<i>ODH Sub-Slab Action Levels (Non-residential)</i>				
		<i>a</i>	<i>b</i>				
<i>Tentatively Identified Compounds (TIC) Volatiles</i>							
(1alpha,2beta,4beta)-1,2,4-Trimethyl-cyclohexane A	ppb	NC	NC	-	-	-	-
1,1,3-Trimethylcyclohexane A	ppb	NC	NC	-	-	-	-
1,1,3-Trimethylcyclopentane A	ppb	NC	NC	-	-	-	-
1,2,3-trimethylcyclopentane (1 alpha,2 alpha,3 beta) A	ppb	NC	NC	-	-	-	-
1,2,4-Trimethyl cyclopentane A	ppb	NC	NC	-	-	-	-
1,4-Dimethylcyclohexane A	ppb	NC	NC	-	-	-	-
2,4-Dimethylhexane A	ppb	NC	NC	-	-	-	-
2-Methylbutane A	ppb	NC	NC	-	-	-	-
3-Methylhexane A	ppb	NC	NC	-	-	-	-
cis-1,3-Dimethylcyclopentane A	ppb	NC	NC	-	-	-	-
Cyclohexane, 1,1,2,3-tetramethyl- A	ppb	NC	NC	-	-	-	-
Cyclotrisiloxane, hexamethyl- A	ppb	NC	NC	-	-	91 JN	-
Propane A	ppb	NC	NC	-	-	U	-
trans-1,2-Dimethylcyclohexane A	ppb	NC	NC	-	-	-	-
Unknown 1	ppb	NC	NC	-	-	5.3 J	-
Unknown 2	ppb	NC	NC	-	-	200 J	-
Unknown 3	ppb	NC	NC	-	-	80 J	-
Unknown 4	ppb	NC	NC	-	-	-	-
Unknown 5	ppb	NC	NC	-	-	-	-
Unknown A	ppb	NC	NC	-	-	69 NJ	-
Unknown B	ppb	NC	NC	-	-	-	-
Unknown C	ppb	NC	NC	-	-	-	-
Unknown D	ppb	NC	NC	-	-	-	-
Unknown E	ppb	NC	NC	-	-	-	-
Unknown F	ppb	NC	NC	-	-	-	-
Unknown G	ppb	NC	NC	-	-	-	-
<i>Gases</i>							
Methane	%	0.5	0.5	-	-	0.20 U	0.066 U
<i>Field Parameter</i>							
Methane, field (unfiltered)	%	0.5	0.5	-	-	-	0.0 /0.0
Methane, field (filtered)	%	0.5	0.5	0	0.0	0 /0	-

Notes:

- J - The chemical was detected by the laboratory, the listed value is an approximate concentration
- JN or NJ - The listed value of the tentatively identified compound is an approximate concentration
- U - The chemical was not detected in the sample at the detection limit shown.
- UJ - The chemical was not detected in the sample at the approximate detection limit shown.
- NC - No criterion
- Not applicable.
- Concentration was greater than applicable criteria.

TABLE 2

**SUMMARY OF INDOOR AIR ANALYTICAL RESULTS
BUILDING 14 - 2003 DRYDEN ROAD
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORaine, OHIO**

Sample Location:				Building 14 Outdoor Air	Building 14 Outdoor Air	Building 14 Outdoor Air	Building 14, IA_A	Building 14, IA_A	Building 14, IA_B
Sample Location:				2003 Dryden Road	2003 Dryden Road	2003 Dryden Road	2003 Dryden Road	2003 Dryden Road	2003 Dryden Road
Sample Date:				1/6/2012	3/27/2012	8/2/2012	3/27/2012	8/2/2012	3/27/2012
Parameter	Units	ODH Indoor Air Screening Levels (Non-residential)	ODH Indoor Air Action Levels (Non-residential)						
		a	b						
Volatile Organic Compounds									
1,1,1-Trichloroethane	ppb	NC	NC	0.035 U	0.030 U	0.030 U	0.082 J	0.57	0.14 J
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.040 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U
1,1,2-Trichloroethane	ppb	NC	NC	0.019 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U
1,1-Dichloroethane	ppb	16	160	0.035 U	0.026 U	0.026 U	0.026 U	0.046 J	0.035 J
1,1-Dichloroethene	ppb	NC	NC	0.030 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U
1,2,4-Trichlorobenzene	ppb	NC	NC	0.050 U	0.098 U	0.098 UJ	0.098 U	0.098 U	0.098 U
1,2,4-Trimethylbenzene	ppb	NC	NC	0.052 U	0.063 U	0.063 U	0.11 J	2.1	0.64
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.018 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U
1,2-Dichlorobenzene	ppb	NC	NC	0.048 U	0.070 U	0.070 U	0.070 U	0.070 U	0.070 U
1,2-Dichloroethane	ppb	NC	NC	0.031 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
1,2-Dichloroethene (total)	ppb	NC	NC	0.014 U	-	-	-	-	-
1,2-Dichloropropane	ppb	NC	NC	0.014 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U
1,3,5-Trimethylbenzene	ppb	NC	NC	0.051 U	0.065 UJ	0.065 U	0.065 UJ	0.58	0.13 J
1,3-Butadiene	ppb	NC	NC	0.010 U	0.064 U	0.064 U	0.55	1.4	0.72
1,3-Dichlorobenzene	ppb	NC	NC	0.044 U	0.065 U	0.065 U	0.065 U	0.065 U	0.065 U
1,4-Dichlorobenzene	ppb	NC	NC	0.044 U	0.064 U	0.064 U	0.064 U	0.083 J	0.064 U
1,4-Dioxane	ppb	NC	NC	0.088 U	0.080 U	0.080 U	0.080 U	0.080 U	0.080 U
2,2,4-Trimethylpentane	ppb	NC	NC	0.052 J	0.039 U	0.084 J	0.55	0.32 J	0.12 J
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	0.29 J	0.38 J	0.56 J	1.7	8.1	3.4
2-Chlorotoluene	ppb	NC	NC	0.047 U	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U
2-Hexanone	ppb	NC	NC	0.039 U	0.058 U	0.058 U	0.058 U	0.10 J	0.058 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.047 U	0.064 U	0.064 U	0.064 U	0.064 U	0.064 U
4-Ethyl toluene	ppb	NC	NC	0.046 U	0.066 U	0.066 U	0.066 U	0.56	0.088 J
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	0.026 U	0.045 U	0.056 J	0.13 J	2.0	0.21 J
Acetone	ppb	NC	NC	1.2 J	1.4 U	5.3	7.7	35 J	12
Allyl chloride	ppb	NC	NC	0.019 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U
Benzene	ppb	2	20	0.24	0.15 J	0.22	0.58	2.4*	0.67
Benzyl chloride	ppb	NC	NC	0.046 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
Bromodichloromethane	ppb	NC	NC	0.028 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U
Bromoform	ppb	NC	NC	0.019 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U
Bromomethane (Methyl bromide)	ppb	NC	NC	0.012 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U
Butane	ppb	NC	NC	1.4	0.72	1.0	3.1	7.0	4.2
Carbon disulfide	ppb	NC	NC	0.066 U	0.031 U	0.13 J	0.35 J	0.30 J	0.28 J
Carbon tetrachloride	ppb	NC	NC	0.080 J	0.086 J	0.075 J	0.090 J	0.12 J	0.090 J
Chlorobenzene	ppb	NC	NC	0.020 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U
Chlorodifluoromethane	ppb	NC	NC	0.25 J	0.32	0.40	0.27	0.60	0.27
Chloroethane	ppb	NC	NC	0.016 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U

TABLE 2

**SUMMARY OF INDOOR AIR ANALYTICAL RESULTS
BUILDING 14 - 2003 DRYDEN ROAD
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAIN, OHIO**

<i>Sample Location:</i>				<i>Building 14 Outdoor Air</i>	<i>Building 14 Outdoor Air</i>	<i>Building 14 Outdoor Air</i>	<i>Building 14, IA_A</i>	<i>Building 14, IA_A</i>	<i>Building 14, IA_B</i>
<i>Sample Location:</i>				<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>
<i>Sample Date:</i>				<i>1/6/2012</i>	<i>3/27/2012</i>	<i>8/2/2012</i>	<i>3/27/2012</i>	<i>8/2/2012</i>	<i>3/27/2012</i>
<i>Parameter</i>	<i>Units</i>	<i>ODH Indoor Air Screening Levels (Non-residential)</i>	<i>ODH Indoor Air Action Levels (Non-residential)</i>						
		<i>a</i>	<i>b</i>						
Chloroform (Trichloromethane)	ppb	80	800	0.049 J	0.038 U	0.038 U	0.038 U	0.15 J	0.038 U
Chloromethane (Methyl chloride)	ppb	NC	NC	0.51	0.57	0.69	0.87	1.9	1.1
cis-1,2-Dichloroethene	ppb	37	370	0.014 U	0.060 U	0.060 U	0.060 U	0.060 U	0.060 U
cis-1,3-Dichloropropene	ppb	NC	NC	0.016 U	0.074 U	0.074 U	0.074 U	0.074 U	0.074 U
Cyclohexane	ppb	NC	NC	0.055 J	0.040 U	0.078 J	0.29 J	0.37 J	0.33 J
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.048 U	0.057 U	0.057 U	0.057 U	0.21	0.061 J
Dibromochloromethane	ppb	NC	NC	0.021 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.49 J	0.42	0.52	0.44	0.64	0.42
Ethylbenzene	ppb	250	2500	0.058 J	0.068 U	0.075 J	0.21	1.2	0.32
Hexachlorobutadiene	ppb	NC	NC	0.065 U	0.078 U	0.078 UJ	0.078 U	0.078 U	0.078 U
Hexane	ppb	NC	NC	0.17 J	0.24 J	0.39 J	0.58	1.2	0.68
Isopropyl alcohol	ppb	NC	NC	0.037 U	0.21 J	0.53 J	2.8	9.3	6.2
Isopropyl benzene	ppb	NC	NC	0.031 U	0.060 U	0.060 U	0.060 U	0.13 J	0.060 U
m&p-Xylenes	ppb	200	2000	0.15 J	0.12 U	0.19 J	0.58	4.4	1.3
Methyl methacrylate	ppb	NC	NC	0.013 U	0.079 U	0.079 U	0.079 U	0.39 J	0.079 U
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.016 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Methylene chloride	ppb	NC	NC	0.12 J	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U
Naphthalene	ppb	2.9	NC	0.086 U	0.090 U	0.090 UJ	0.090 U	0.37 J	0.20 J
N-Butylbenzene	ppb	NC	NC	0.055 U	0.046 UJ	0.046 U	0.046 UJ	0.10 J	0.046 UJ
N-Decane	ppb	NC	NC	-	-	0.056 U	-	0.54 J	-
N-Dodecane	ppb	NC	NC	-	-	0.078 UJ	-	0.75 J	-
N-Heptane	ppb	NC	NC	0.085 J	0.093 J	0.19 J	0.49 J	2.6	0.89
Nonane	ppb	NC	NC	-	-	0.043 U	-	0.26 J	-
N-Propylbenzene	ppb	NC	NC	0.050 U	0.056 U	0.056 U	0.056 U	0.21 J	0.056 U
N-Undecane	ppb	NC	NC	-	-	0.062 U	-	2.0	-
Octane	ppb	NC	NC	-	-	0.077 J	-	0.52	-
o-Xylene	ppb	200	2000	0.051 J	0.061 U	0.062 J	0.19 J	1.7	0.48
Pentane	ppb	NC	NC	-	-	0.82 J	-	15	-
Styrene	ppb	NC	NC	0.030 U	0.058 U	0.058 U	0.058 U	0.62	0.083 J
tert-Butyl alcohol	ppb	NC	NC	0.071 U	0.038 U	0.038 U	0.50 J	0.94 J	0.56 J
tert-Butylbenzene	ppb	NC	NC	0.047 U	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U
Tetrachloroethene	ppb	25	250	0.023 J	0.040 U	0.040 U	0.040 U	0.054 J	0.040 U
Tetrahydrofuran	ppb	NC	NC	0.018 U	0.063 U	0.063 U	0.18 J	0.063 U	0.10 J
Toluene	ppb	NC	NC	0.39	0.39	0.85	13	35	22
trans-1,2-Dichloroethene	ppb	NC	NC	0.032 U	0.050 U	0.050 U	0.091 J	0.36	0.17 J
trans-1,3-Dichloropropene	ppb	NC	NC	0.020 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U
Trichloroethene	ppb	2	20	0.030 U	0.036 U	0.036 U	0.047 J	0.043 J	0.080 J
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.21	0.20	0.29	0.22	0.47	0.25
Trifluorotrchloroethane (Freon 113)	ppb	NC	NC	0.076 J	0.068 J	0.071 J	0.14 J	0.99	0.20
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.019 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U
Vinyl chloride	ppb	2	20	0.029 U	0.071 U	0.071 U	0.071 U	0.071 U	0.071 U
Xylenes (total)	ppb	NC	NC	0.20	-	-	-	-	-

TABLE 2

**SUMMARY OF INDOOR AIR ANALYTICAL RESULTS
BUILDING 14 - 2003 DRYDEN ROAD
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORaine, OHIO**

<i>Sample Location:</i>				<i>Building 14 Outdoor Air</i>	<i>Building 14 Outdoor Air</i>	<i>Building 14 Outdoor Air</i>	<i>Building 14, IA_A</i>	<i>Building 14, IA_A</i>	<i>Building 14, IA_B</i>
<i>Sample Location:</i>				<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>
<i>Sample Date:</i>				<i>1/6/2012</i>	<i>3/27/2012</i>	<i>8/2/2012</i>	<i>3/27/2012</i>	<i>8/2/2012</i>	<i>3/27/2012</i>
<i>Parameter</i>	<i>Units</i>	<i>ODH Indoor Air Screening Levels (Non-residential)</i>	<i>ODH Indoor Air Action Levels (Non-residential)</i>						
		<i>a</i>	<i>b</i>						
<i>Tentatively Identified Compounds (TIC) Volatiles</i>									
1,2-Pentadiene A	ppb	NC	NC	-	-	-	-	4.1 NJ	-
1,4-Pentadiene A	ppb	NC	NC	-	-	-	-	-	-
1R- α -Pinene A	ppb	NC	NC	-	-	-	-	5.9 NJ	-
2-Methylbutane A	ppb	NC	NC	-	-	-	-	5.3 NJ	-
Acetaldehyde A	ppb	NC	NC	-	-	3.1 NJ	-	-	-
Cyclohexane, methyl A	ppb	NC	NC	-	-	-	-	3.5 NJ	-
d-Limonene A	ppb	NC	NC	-	-	-	-	71 NJ	-
Ethanol A	ppb	NC	NC	-	-	-	-	22 NJ	-
Isobutylene A	ppb	NC	NC	-	-	-	-	3.7 NJ	-
Methanol A	ppb	NC	NC	-	-	-	-	35 NJ	-
Propane A	ppb	NC	NC	-	-	U	-	U	-
Propylene (propene) A	ppb	NC	NC	-	-	-	-	9.3 NJ	-
Unknown A	ppb	NC	NC	-	-	-	-	-	-
Unknown B	ppb	NC	NC	-	-	-	-	-	-
<i>Gases</i>									
Methane	%	0.05	0.05	-	-	0.21 U ^{ab}	-	0.21 U ^{ab}	-
<i>Field Parameter</i>									
Methane, field (unfiltered)	%	0.05	0.05	0.0 /0.0	-	-	-	-	-
Methane, field (filtered)	%	0.05	0.05	-	0 /0.0	0 /0	0.0	0 /0	0 /0.0

Notes:

J - The chemical was detected by the laboratory, the listed value is an approximate concentration

JN or NJ - The listed value of the tentatively identified compound is an approximate concentration

U - The chemical was not detected in the sample at the detection limit shown.

UJ - The chemical was not detected in the sample at the approximate detection limit shown.

NC - No criterion

-- Not applicable.

 - Concentration was greater than applicable criteria.

TABLE 2

**SUMMARY OF INDOOR AIR ANALYTICAL RESULTS
BUILDING 14 - 2003 DRYDEN ROAD
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORaine, OHIO**

<i>Sample Location:</i>				<i>Building 14, IA_B</i>	<i>Building 14, IA_C</i>	<i>Building 14, IA_C</i>	<i>Building 14, IA_C</i>
<i>Sample Location:</i>				<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>
<i>Sample Date:</i>				<i>8/2/2012</i>	<i>3/26/2012</i>	<i>3/27/2012</i>	<i>8/2/2012</i>
<i>Parameter</i>	<i>Units</i>	<i>ODH Indoor Air Screening Levels (Non-residential)</i>	<i>ODH Indoor Air Action Levels (Non-residential)</i>				
		<i>a</i>	<i>b</i>				
<i>Volatile Organic Compounds</i>							
1,1,1-Trichloroethane	ppb	NC	NC	0.57	-	0.088 J	0.53
1,1,2,2-Tetrachloroethane	ppb	NC	NC	0.12 U	-	0.061 U	0.12 U
1,1,2-Trichloroethane	ppb	NC	NC	0.11 U	-	0.054 U	0.11 U
1,1-Dichloroethane	ppb	16	160	0.055 J	-	0.026 U	0.052 U
1,1-Dichloroethene	ppb	NC	NC	0.064 U	-	0.032 U	0.064 U
1,2,4-Trichlorobenzene	ppb	NC	NC	0.20 U	-	0.098 U	0.20 U
1,2,4-Trimethylbenzene	ppb	NC	NC	1.6	-	0.72	1.4
1,2-Dibromoethane (Ethylene dibromide)	ppb	NC	NC	0.088 U	-	0.044 U	0.088 U
1,2-Dichlorobenzene	ppb	NC	NC	0.14 U	-	0.070 U	0.14 U
1,2-Dichloroethane	ppb	NC	NC	0.094 U	-	0.047 U	0.094 U
1,2-Dichloroethene (total)	ppb	NC	NC	-	-	-	-
1,2-Dichloropropane	ppb	NC	NC	0.10 U	-	0.052 U	0.10 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppb	NC	NC	0.064 U	-	0.032 U	0.064 U
1,3,5-Trimethylbenzene	ppb	NC	NC	0.49	-	0.16 J	0.13 U
1,3-Butadiene	ppb	NC	NC	1.7	-	0.59	1.6
1,3-Dichlorobenzene	ppb	NC	NC	0.13 U	-	0.065 U	0.13 U
1,4-Dichlorobenzene	ppb	NC	NC	0.13 U	-	0.064 U	0.13 U
1,4-Dioxane	ppb	NC	NC	0.16 U	-	0.080 U	0.16 U
2,2,4-Trimethylpentane	ppb	NC	NC	0.30 J	-	0.096 J	0.30 J
2-Butanone (Methyl ethyl ketone) (MEK)	ppb	NC	NC	12	-	2.8	7.3
2-Chlorotoluene	ppb	NC	NC	0.13 U	-	0.063 U	0.13 U
2-Hexanone	ppb	NC	NC	0.12 U	-	0.058 U	0.12 U
2-Phenylbutane (sec-Butylbenzene)	ppb	NC	NC	0.13 U	-	0.064 U	0.13 U
4-Ethyl toluene	ppb	NC	NC	0.49 J	-	0.095 J	0.13 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppb	NC	NC	1.6	-	0.23 J	1.7
Acetone	ppb	NC	NC	32 J	-	15	31 J
Allyl chloride	ppb	NC	NC	0.096 U	-	0.048 U	0.096 U
Benzene	ppb	2	20	2.1 ^a	-	0.60	2.0
Benzyl chloride	ppb	NC	NC	0.16 U	-	0.078 U	0.16 U
Bromodichloromethane	ppb	NC	NC	0.088 U	-	0.044 U	0.088 U
Bromoform	ppb	NC	NC	0.096 U	-	0.048 U	0.096 U
Bromomethane (Methyl bromide)	ppb	NC	NC	0.064 U	-	0.032 U	0.064 U
Butane	ppb	NC	NC	7.7	-	3.5	6.5
Carbon disulfide	ppb	NC	NC	0.28 J	-	0.22 J	0.27 J
Carbon tetrachloride	ppb	NC	NC	0.11 J	-	0.090 J	0.12 J
Chlorobenzene	ppb	NC	NC	0.098 U	-	0.049 U	0.098 U
Chlorodifluoromethane	ppb	NC	NC	0.62	-	0.26	0.66
Chloroethane	ppb	NC	NC	0.070 U	-	0.035 U	0.070 U

TABLE 2

**SUMMARY OF INDOOR AIR ANALYTICAL RESULTS
BUILDING 14 - 2003 DRYDEN ROAD
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORaine, OHIO**

<i>Sample Location:</i>				<i>Building 14, IA_B</i>	<i>Building 14, IA_C</i>	<i>Building 14, IA_C</i>	<i>Building 14, IA_C</i>
<i>Sample Location:</i>				<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>
<i>Sample Date:</i>				<i>8/2/2012</i>	<i>3/26/2012</i>	<i>3/27/2012</i>	<i>8/2/2012</i>
<i>Parameter</i>	<i>Units</i>	<i>ODH Indoor Air Screening Levels (Non-residential)</i>	<i>ODH Indoor Air Action Levels (Non-residential)</i>				
		<i>a</i>	<i>b</i>				
Chloroform (Trichloromethane)	ppb	80	800	0.18 J	-	0.038 U	0.15 J
Chloromethane (Methyl chloride)	ppb	NC	NC	2.3	-	0.97	1.7
cis-1,2-Dichloroethene	ppb	37	370	0.12 U	-	0.060 U	0.12 U
cis-1,3-Dichloropropene	ppb	NC	NC	0.15 U	-	0.074 U	0.15 U
Cyclohexane	ppb	NC	NC	0.50 J	-	0.31 J	0.40 J
Cymene (p-Isopropyltoluene)	ppb	NC	NC	0.15 J	-	0.084 J	0.16 J
Dibromochloromethane	ppb	NC	NC	0.084 U	-	0.042 U	0.084 U
Dichlorodifluoromethane (CFC-12)	ppb	NC	NC	0.68	-	0.43	0.72
Ethylbenzene	ppb	250	2500	0.95	-	0.33	0.81
Hexachlorobutadiene	ppb	NC	NC	0.16 U	-	0.078 U	0.16 U
Hexane	ppb	NC	NC	1.2	-	0.44 J	1.0
Isopropyl alcohol	ppb	NC	NC	10	-	6.1	10
Isopropyl benzene	ppb	NC	NC	0.12 U	-	0.060 U	0.12 U
m&p-Xylenes	ppb	200	2000	3.6	-	1.3	3.1
Methyl methacrylate	ppb	NC	NC	0.34 J	-	0.079 U	0.36 J
Methyl tert butyl ether (MTBE)	ppb	NC	NC	0.34 U	-	0.17 U	0.34 U
Methylene chloride	ppb	NC	NC	0.090 U	-	0.045 U	0.090 U
Naphthalene	ppb	2.9	NC	0.34 J	-	0.17 J	0.18 U
N-Butylbenzene	ppb	NC	NC	0.092 U	-	0.046 UJ	0.092 U
N-Decane	ppb	NC	NC	0.47 J	-	-	0.39 J
N-Dodecane	ppb	NC	NC	0.77 J	-	-	0.35 J
N-Heptane	ppb	NC	NC	4.2	-	0.67	2.7
Nonane	ppb	NC	NC	0.24 J	-	-	0.22 J
N-Propylbenzene	ppb	NC	NC	0.16 J	-	0.057 J	0.15 J
N-Undecane	ppb	NC	NC	1.7 J	-	-	1.5 J
Octane	ppb	NC	NC	0.64 J	-	-	0.46 J
o-Xylene	ppb	200	2000	1.4	-	0.47	1.2
Pentane	ppb	NC	NC	19	-	-	26
Styrene	ppb	NC	NC	0.55	-	0.094 J	0.47
tert-Butyl alcohol	ppb	NC	NC	0.84 J	-	0.38 J	0.97 J
tert-Butylbenzene	ppb	NC	NC	0.13 U	-	0.066 U	0.13 U
Tetrachloroethene	ppb	25	250	0.080 U	-	0.040 U	0.080 U
Tetrahydrofuran	ppb	NC	NC	0.13 U	-	0.063 U	0.13 U
Toluene	ppb	NC	NC	57	-	34	34
trans-1,2-Dichloroethene	ppb	NC	NC	0.44	-	0.10 J	0.42
trans-1,3-Dichloropropene	ppb	NC	NC	0.096 U	-	0.048 U	0.096 U
Trichloroethene	ppb	2	20	0.072 U	-	0.036 J	0.079 J
Trichlorofluoromethane (CFC-11)	ppb	NC	NC	0.48	-	0.23	0.47
Trifluorotrchloroethane (Freon 113)	ppb	NC	NC	1.1	-	0.14 J	0.96
Vinyl bromide (Bromoethene)	ppb	NC	NC	0.070 U	-	0.035 U	0.070 U
Vinyl chloride	ppb	2	20	0.14 U	-	0.071 U	0.14 U
Xylenes (total)	ppb	NC	NC	-	-	-	-

TABLE 2

**SUMMARY OF INDOOR AIR ANALYTICAL RESULTS
BUILDING 14 - 2003 DRYDEN ROAD
VAPOR INTRUSION INVESTIGATION
SOUTH DAYTON DUMP AND LANDFILL SITE
MORaine, OHIO**

<i>Sample Location:</i>	<i>Building 14, IA_B</i>	<i>Building 14, IA_C</i>	<i>Building 14, IA_C</i>	<i>Building 14, IA_C</i>			
<i>Sample Location:</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>	<i>2003 Dryden Road</i>			
<i>Sample Date:</i>	<i>8/2/2012</i>	<i>3/26/2012</i>	<i>3/27/2012</i>	<i>8/2/2012</i>			
<i>Parameter</i>	<i>Units</i>	<i>ODH Indoor Air Screening Levels (Non-residential)</i>	<i>ODH Indoor Air Action Levels (Non-residential)</i>				
		<i>a</i>	<i>b</i>				
<i>Tentatively Identified Compounds (TIC) Volatiles</i>							
1,2-Pentadiene A	ppb	NC	NC	-	-	-	-
1,4-Pentadiene A	ppb	NC	NC	5.3 NJ	-	-	-
1R-alpha-Pinene A	ppb	NC	NC	-	-	-	-
2-Methylbutane A	ppb	NC	NC	5.6 NJ	-	-	5.4 NJ
Acetaldehyde A	ppb	NC	NC	-	-	-	-
Cyclohexane, methyl A	ppb	NC	NC	6.6 NJ	-	-	-
d-Limonene A	ppb	NC	NC	68 NJ	-	-	51 NJ
Ethanol A	ppb	NC	NC	24 NJ	-	-	27 NJ
Isobutylene A	ppb	NC	NC	-	-	-	-
Methanol A	ppb	NC	NC	31 NJ	-	-	28 NJ
Propane A	ppb	NC	NC	U	-	-	U
Propylene (propene) A	ppb	NC	NC	-	-	-	-
Unknown A	ppb	NC	NC	12 NJ	-	-	5.2 NJ
Unknown B	ppb	NC	NC	-	-	-	10 NJ
<i>Gases</i>							
Methane	%	0.05	0.05	0.19 U ^{ab}	-	-	0.19 U ^{ab}
<i>Field Parameter</i>							
Methane, field (unfiltered)	%	0.05	0.05	-	-	-	-
Methane, field (filtered)	%	0.05	0.05	0 / 0	0	0.0	0 / 0

Notes:

- J - The chemical was detected by the laboratory, the listed value is an approximate concentration
- JN or NJ - The listed value of the tentatively identified compound is an approximate concentration
- U - The chemical was not detected in the sample at the detection limit shown.
- UJ - The chemical was not detected in the sample at the approximate detection limit shown.
- NC - No criterion
- Not applicable.
- Concentration was greater than applicable criteria.